

REMARKS

The claims are 11 to 21.

The above amendment is responsive to points set forth in the Official Action.

Claim 11 has been amended based on the description in paragraph [0032] on page 14 of the present specification.

Claim 21 has been amended also based on the description in paragraph [0032] on page 14 of the present specification.

Claims 11 to 13, 16 and 18 to 20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Billmers et al. (U.S. 2002/0015854).

Claims 14, 15 and 17 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Billmers et al. (U.S. 2002/0015854) in view of Reiners et al. (U.S. 6,090,871).

These rejections are respectfully traversed.

Billmers et al. disclose a paper coating composition providing good barrier properties comprising a blend of hydrophobically modified high amylose starch and polyvinyl alcohol. However, Billmers et al. do not teach or suggest that their coating further comprises a fatty acid (see page 4 of the Official Action).

Reiners et al. disclose that cationic polycondensates with hydrophobic radicals, for example based on fatty acid-modified polyamines, are suitable merely as sizing agents for paper. However, Reiners et al. do not disclose a coating layer which contains a certain amount of fatty acid along with a hydrophobized starch and a crosslinking agent and provides high oil resistance with a sheet material when formed on the sheet material. It is noted that the sheet material has little or no oil resistance when fatty acid alone is applied to the substrate of the sheet material, as described in paragraph [0027] on page 12 of the present specification. Thus, fatty acid can yield high oil resistance only when it is used in combination with the hydrophobized starch and the crosslinking agent.

Further, in order to effectively improve oil resistance of the sheet material, the fatty acid is added to the coating layer in a solid content of 1 to 50% by weight, more preferably 3 to 15 by

weight based on the total weight of the solid of the coating layer, as defined by claims 11 and 21.

However, none of cited references disclose or suggest such a feature.

Furthermore, it goes without saying that the sizing agents are normally used for interfering with or reducing absorption of water into a paper to thereby retain a water-based ink or the like, outside on the paper surface, not for yielding high oil resistance to the paper. Also Reiners et al. do not teach using a fatty acid for yielding oil resistance to the paper.


In view of the foregoing, the present claims are clearly unobvious over the cited references, alone or combined.

No further issues remaining, allowance of this application is respectfully requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact undersigned at the telephone number below.

Respectfully submitted,

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